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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/002,784A

DATE: 08/08/2002

TIME: 13:45:10

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\08082002\J002784A.raw

W--> 3 /33

10 <110> APPLICANT: Ulrich, Robert G.
 12 <120> TITLE OF INVENTION: Bacterial Superantigen Vaccines
 14 <130> FILE REFERENCE: 003/233/SAP
 16 <140> CURRENT APPLICATION NUMBER: 10/002,784A
 18 <141> CURRENT FILING DATE: 2001-11-26
 20 <150> PRIOR APPLICATION NUMBER: 08/882,431; 09/144,776

W--> 22 <151> PRIOR FILING DATE: 97-06-25; 98-09-01

24 <160> NUMBER OF SEQ ID NOS: 40
 26 <170> SOFTWARE: Apple Macintosh Microsoft Word 6.0
 28 <210> SEQ ID NO: 1
 30 <211> LENGTH: 830
 31 <212> TYPE: DNA
 32 <213> ORGANISM: Artificial sequence
 33 <220> FEATURE:
 34 <223> OTHER INFORMATION: mutant staphylococcal enterotoxin A periplasmic
 35 <400> SEQUENCE: 1

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37 atgaaaaaaaa cagcatttac attactttta ttcattgccc      40
38 taacgttgac aacaagtcca ctgttaaatg gtagcgagaa      80
39 aagcgaagaa ataatgaaa aagatttgcg aaaaaagtct     120
40 gaattgcagg gaacagcttt aggcaatctt aaacaaatct     160
41 attattacaa tgaaaaagct aaaactgaaa ataaagagag     200
42 tcacgatcaa tttcgacagc atactatatt gtttaaaggc     240
43 ttttttacag atcattcgtg gtataacgat ttattagtag     280
44 gttttgattc aaaggatatt gttgataaat ataaagggaa     320
45 aaaagtagac ttgtatggtg cttatgcttg ttatcaatgt     360
46 gcgggtggta caccaaacaa aacagcttgt atgtatggtg     400
47 gtgtaacggt acatgataat aatcgattga ccgaagagaa     440
48 aaaagtgccg atcaatttat ggctagacgg taaacaaaat     480
49 acagtacctt tggaaacggt taaaacgaat aagaaaaatg     520
50 taactgttca ggagttggat cttcaagcaa gacgtttatt     560
51 acaggaaaaa tataatttat ataactctga tgtttttgat     600
52 ggaaggttc agaggggatt aatcgtgttt catacttcta     640
53 cagaaccttc ggtaatttac gatttatttg gtgctcaagg     680
54 acagtattca aatacactat taagaatata tagagataat     720
55 aaaacgatta actctgaaaa catgcatatt gatatatatt     760
56 tatatacaag taaacatggt tagttttgac caacgtaaat     800
57 ttcagattat tatgaaccga taataatcta     830

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60 <210> SEQ ID NO: 2

62 <211> LENGTH: 257

63 <212> TYPE: PRT

64 <213> ORGANISM: Artificial sequence

65 <220> FEATURE:

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66 <223> OTHER INFORMATION: mutant staphylococcal enterotoxin A periplasmic
 67 <400> SEQUENCE: 2
 69 Met Lys Lys Thr Ala Phe Thr Leu Leu Leu
 70 1 5 10
 71 Phe Ile Ala Leu Thr Leu Thr Thr Ser Pro
 72 15 20
 73 Leu Val Asn Gly Ser Glu Lys Ser Glu Glu
 74 25 30
 75 Ile Asn Glu Lys Asp Leu Arg Lys Lys Ser
 76 35 40
 77 Glu Leu Gln Gly Thr Ala Leu Gly Asn Leu
 78 45 50
 79 Lys Gln Ile Tyr Tyr Tyr Asn Glu Lys Ala
 80 55 60
 81 Lys Thr Glu Asn Lys Glu Ser His Asp Gln
 82 65 70
 83 Phe Arg Gln His Thr Ile Leu Phe Lys Gly
 84 75 80
 85 Phe Phe Thr Asp His Ser Trp Tyr Asn Asp
 86 85 90
 87 Leu Leu Val Arg Phe Asp Ser Lys Asp Ile
 88 95 100
 89 Val Asp Lys Tyr Lys Gly Lys Lys Val Asp
 90 105 110
 91 Leu Tyr Gly Ala Tyr Ala Gly Tyr Gln Cys
 92 115 120
 93 Ala Gly Gly Thr Pro Asn Lys Thr Ala Cys
 94 125 130
 95 Met Tyr Gly Gly Val Thr Leu His Asp Asn
 96 135 140
 97 Asn Arg Leu Thr Glu Glu Lys Lys Val Pro
 98 145 150
 99 Ile Asn Leu Trp Leu Asp Gly Lys Gln Asn
 100 155 160
 101 Thr Val Pro Leu Glu Thr Val Lys Thr Asn
 102 165 170
 103 Lys Lys Asn Val Thr Val Gln Glu Leu Asp
 104 175 180
 105 Leu Gln Ala Arg Arg Tyr Leu Gln Glu Lys
 106 185 190
 107 Tyr Asn Leu Tyr Asn Ser Asp Val Phe Asp
 108 195 200
 109 Gly Lys Val Gln Arg Gly Leu Ile Val Phe
 110 205 210
 111 His Thr Ser Thr Glu Pro Ser Val Asn Tyr
 112 215 220
 113 Asp Leu Phe Gly Ala Gln Gly Gln Tyr Ser
 114 225 230
 115 Asn Thr Leu leu Arg Ile Tyr Arg Asp Asn

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116                235                240
117 Lys Thr Ile Asn Ser Glu Asn Met His Ile
118                245                250
119 Asp Ile Tyr Leu Tyr Thr Ser
120                255
122 <210> SEQ ID NO: 3
124 <211> LENGTH: 757
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial sequence
127 <220> FEATURE:
128 <223> OTHER INFORMATION: mutant staphylococcal enterotoxin A cytoplasmic
129 <400> SEQUENCE: 3
131 atgagaaaag cgaagaaata aatgaaaaag atttgcgaaa    40
132 aaagtctgaa ttgcagggaa cagctttagg caatcttaaa    80
133 caaatctatt attacaatga aaaagctaaa actgaaaata   120
134 aagagagtca cgatcaattt cgacagcata ctatattgtt   160
135 taaaggcttt ttacagatc attcgtggta taacgattta   200
136 ttagtacgtt ttgattcaaa ggatattgtt gataaatata   240
137 aagggaaaaa agtagacttg tatggtgctt atgctgggta   280
138 tcaatgtgcg ggtggtacac caaacaaaac agcttgtagt   320
139 tatggtgggt taacgttaca tgataataat cgattgaccg   360
140 aagagaaaaa agtgcgatc aatttatggc tagacggtaa   400
141 acaaaataca gtaccttggg aaacgggttaa aacgaataag   440
142 aaaaatgtaa ctgttcagga gttggatctt caagcaagac   480
143 gttatttaca ggaataatat aatttatata actctgatgt   520
144 ttttgatggg aaggttcaga ggggattaat cgtgtttcat   560
145 acttctacag aaccttcggt taattacgat ttatttggtg   600
146 ctcaaggaca gtattcaaat acactattaa gaatatatag   640
147 agataataaa acgattaact ctgaaaacat gcatattgat   680
148 atatatatat atacaagtta aacatggtag ttttgaccaa   720
149 cgtaatgttc agattattat gaaccgagaa taatcta    757
151 <210> SEQ ID NO: 4
153 <211> LENGTH: 233
154 <212> TYPE: PRT
155 <213> ORGANISM: artificial sequence
156 <220> FEATURE:
157 <223> OTHER INFORMATION: mutant staphylococcal enterotoxin A cytoplasmic
159 <400> SEQUENCE: 4
161 Met Glu Lys Ser Glu Glu Ile Asn Glu Lys
162                5                10
163 Asp Leu Arg Lys Lys Ser Glu Leu Gln Gly
164                15                20
165 Thr Ala Leu Gly Asn Leu Lys Gln Ile Tyr
166                25                30
167 Tyr Tyr Asn Glu Lys Ala Lys Thr Glu Asn
168                35                40
169 Lys Glu Ser His Asp Gln Phe Arg Gln His
170                45                50
171 Thr Ile Leu Phe Lys Gly Phe Phe Thr Asp

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172                               55                               60
173 His Ser Trp Tyr Asn Asp Leu Leu Val Arg
174                               65                               70
175 Phe Asp Ser Lys Asp Ile Val Asp Lys Tyr
176                               75                               80
177 Lys Gly Lys Lys Val Asp Leu Tyr Gly Ala
178                               85                               90
179 Tyr Ala Gly Tyr Gln Cys Ala Gly Gly Thr
180                               95                              100
181 Pro Asn Lys Thr Ala Cys Met Tyr Gly Gly
182                              105                              110
183 Val Thr Leu His Asp Asn Asn Arg Leu Thr
184                              115                              120
185 Glu Glu Lys Lys Val Pro Ile Asn Leu Trp
186                              125                              130
187 Leu Asp Gly Lys Gln Asn Thr Val Pro Leu
188                              135                              140
189 Glu Thr Val Lys Thr Asn Lys Lys Asn Val
190                              145                              150
191 Thr Val Gln Glu Leu Asp Leu Gln Ala Arg
192                              155                              160
193 Arg Tyr Leu Gln Glu Lys Tyr Asn Leu Tyr
194                              165                              170
195 Asn Ser Asp Val Phe Asp Gly Lys Val Gln
196                              175                              180
197 Arg Gly Leu Ile Val Phe His Thr Ser Thr
198                              185                              190
199 Glu Pro Ser Val Asn Tyr Asp Leu Phe Gly
200                              195                              200
201 Ala Gln Gly Gln Tyr Ser Asn Thr Leu Leu
202                              205                              210
203 Arg Ile Tyr Arg Asp Asn Lys Thr Ile Asn
204                              215                              220
205 Ser Glu Asn Met His Ile Asp Ile Tyr Leu
206                              225                              230
207 Tyr Thr Ser
210 <210> SEQ ID NO: 5
212 <211> LENGTH: 1712
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: mutant staphylococcal enterotoxin B
217 <400> SEQUENCE: 5
219 gaactaggta gaaaaataat tatgagaaaa cactatgttg          40
220 ttaaagatgt ttctgtatat aagtttaggt gatgtatagt          80
221 tacttaattt taaaagcata acttaattaa tataaataac        120
222 atgagattat taaatataat taagtttctt ttaatgtttt        160
223 tttaattgaa tatttaagat tataacatat atttaaagtg        200
224 tatctagata ctttttgga atgttgata aaggagataa        240

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DATE: 08/08/2002
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Input Set : A:\Sequence.txt
Output Set: N:\CRF4\08082002\J002784A.raw

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225 aaaatgtata agagattatt tatttcacat gtaattttga 280
226 tattcgcaact gatattagtt atttctacac ccaacgtttt 320
227 agcagagagt caaccagatc ctaaaccaga tgagttgcac 360
228 aaatcgagta aattcactgg tttgatggaa gatatgaaag 400
229 ttttgtatga tgataatcat gtatcagcaa taaacgttaa 440
230 atctatagat caatttctat accttgactt aatataattct 480
231 attaaggaca ctaagttagg ggattatgat aatgttcogag 520
232 tcgaatttaa aaacaaagat tttagctgata aatacaaaga 560
233 taaatacgta gatgtgtttg gagctaatta ttattatcaa 600
234 tgttattttt ctaaaaaaac gaatgatatt aattcgcatc 640
235 aaactgacaa acgaaaaaact tgtatgtatg gtggtgtaac 680
236 tgagcataat ggaaccaaat tagataaata tagaagtatt 720
237 actgttcoggg tatttgaaga tggtaaaaat ttattatctt 760
238 ttgacgtaca aactaataag aaaaagggtga ctgctcaaga 800
239 attagattac ctaactcgtc actatttggt gaaaaataaa 840
240 aaactctatg aatttaacaa ctgcgccttat gaaacgggat 880
241 atattaaatt tatagaaaat gagaatagct ttgggtatga 920
242 catgatgcct gcaccaggag ataaatttgc ccaatctaaa 960
243 tatttaatga tgtacaatga caataaaatg gttgattcta 1000
244 aagatgtgaa gattgaagtt tatcttacga caaagaaaaa 1040
245 gtgaaattat attttagaaa agtaaatatg aagagttagt 1080
246 aattaaggca ggcacttata gagtaoctgc cttttctaatt 1120
247 attatttagt tatagttatt tttgttatat ctctctgatt 1160
248 tagcattaac cccttggtgc cattatagtt ttcaccaact 1200
249 tttagctgaaa ttgggggatac atttttatct ttactatgga 1240
250 tagttactgt gtcgcgcttt ttaacgattt gtttctcttt 1280
251 taatttgtca gttaattttt tccatgcata atttgcgtca 1320
252 aacctatttc catttgattt tattcttgac aatcaaatc 1360
253 ttttaacact atcgggatta atcggcttgt tattaaaatt 1400
254 actaagtcca tctaaatcag ctgtaccctg aatactactt 1440
255 tcgccaccat tatttaaatt gtacgtaaca ccaactgtct 1480
256 catttgctgt tttatcgata atatttgctt ctttcaaagc 1520
257 atctcttaca tttttccata agtctctatc tgttatttca 1560
258 gaagcctttg caacgttatt aataccatta taatttgaat 1600
259 aagaatgaaa acctgaacct actgttggtt aaactaaagc 1640
260 acttgctatc aatgttcttg ttaatagttt tttattcatt 1680
261 ttattttctc ctataactta ttgcaatcg at 1712
263 <210> SEQ ID NO: 6
265 <211> LENGTH: 266
266 <212> TYPE: PRT
267 <213> ORGANISM: Artificial sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: mutant staphylococcal enterotoxin B
270 <400> SEQUENCE: 6
272 Met Tyr Lys Arg Leu Phe Ile Ser His Val
273 5 10
274 Ile Leu Ile Phe Ala Leu Ile Leu Val Ile
275 15 20
276 Ser Thr Pro Asn Val Leu Ala Glu Ser Gln

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VERIFICATION SUMMARY

PATENT APPLICATION: US/10/002,784A

DATE: 08/08/2002

TIME: 13:45:11

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\08082002\J002784A.raw

L:3 M:259 W: Allowed number of lines exceeded, (1) GENERAL INFORMATION:
L:22 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD